Chapter 5: Performance Reporting

The TSP charts a course for SDOT to take in order to develop and maintain a 21st Century transportation network. It defines strategies to preserve, maintain, grow and enhance Seattle's transportation network. Many of the TSP strategies can be accomplished with a one-time action, such as publishing the Right-of-Way Improvements Manual, or installing a bicycle rack. Others are activities where SDOT is in a coordination role, such as working with other government entities to implement transportation projects. This chapter focuses on SDOT activities that are on-going and contribute to the long-term performance of the transportation network.

Reporting on Performance—Current Tools

SDOT reports on performance in a number of ways:

SDOT Quarterly and Annual Reports give an overview of the projects and activities of the Department such as project management and financial management monitoring. Since 2003, SDOT has augmented the Annual Report with quarterly reporting that includes an overview of facilities built, activities complete and project status.

The Environmental Action Agenda (EAA) and SDOT Environmental Management System (EMS): SDOT reports on progress towards meeting environmental goals through both the EAA (monitored by the Office of Sustainability and the Environment) and a departmental EMS. The EAA presents citywide goals for protecting environmental quality, promoting environmental justice, and improving quality-of-life in Seattle. The EMS provides SDOT with a set of tools to identify and solve environmental problem. Both the EAA and the EMS have regular reporting cycles and report on a number of internal measures such as: reduce use of hazardous materials and waste generation for operations activities, decrease use of pesticide to maintain trees and landscaping, encourage city employees to commute to work without driving alone, and promote fuel efficiency and reduced emissions with a fleet of hybrid and natural gas vehicles.

Program specific reporting such as infrastructure asset condition reporting such as pavement condition and bridge load rating every two years.

SDOT Performance Measures

A growing number of municipalities are establishing performance measures as a means of defining goals, measurable objectives and targets, and then reporting on progress towards completion over time. Along with financial information, performance reports are used to initiate discussion on ways to improve efficiency and effectiveness over time. Meaningful performance measures can be challenging to track because they rely on resource intensive data gathering and analysis in order to report consistently over a period of time. However, SDOT management and staff recognize the need to have, and report on, meaningful performance measures in order to communicate more effectively to the public, elected officials and agency partners.

Many of the SDOT's current reporting measures are output measures—they indicate production, but do not chart progress towards an established goal. Others, such as program specific reporting, do establish goals and work towards accomplishing targets. The tables on the following pages summarize the goals, objectives and five-year targets to measure performance in the following areas:

- Improve safety
- Preserve and maintain transportation infrastructure
- Provide mobility and access through transportation choices

Improving the environment and supporting the urban village land use strategy are two main considerations that are addressed in many of the measures in each category.

Some of the measures listed on the following pages are currently tracked and reported on, many are still in development. In these cases, objectives include defining a system or network by a certain date (e.g. complete the Bicycle Master Plan by 2006). Once the system is defined and a baseline established, SDOT will report on progress made towards meeting the targets.

Improve Safety

Goal: Continually strive to improve safety by reducing vehicular, pedestrian and bicycle collisions citywide.

Objective	2005 Baseline	Target	Comments
Implement treatments at identified high-collision locations to reduce the frequency of collisions.	• 249 vehicular collisions at the top 15 signalized intersection locations in 2003 • 106 vehicular collisions at the top 15 non-signalized intersection locations in 2003 • 176 vehicular collisions at the top 15 mid-block locations in 2003	• 5% reduction in number of collisions at top 15 signalized, non-signalized, and mid-block locations identified in 2003 by 2010.	Collision frequencies at specific locations can change due to a wide variety of factors, including new development, major construction, and land use changes. The City is currently working to integrate its collision information with the State's, but does not yet have a fully functioning system. In the near future, we would be interested in reporting in more detail on the type and severity of collisions, but at this time are not prepared to do so. In addition, our system is not yet set up to report on bicycle collisions in an accurate, meaningful manner.
	• 16,046 citywide vehicular collisions in 2003 • 446 citywide pedestrian collisions in 2003	• 3% reduction in number of citywide collisions by 2010. • 3% reduction in number of citywide pedestrian collisions by 2010.	
Make improvements to uncontrolled pedestrian crossing locations consistent with federal crosswalk guidelines.	93% of marked crosswalks at uncontrolled locations are consistent with federal guidelines and city policy. (based on 2001 numbers)	100% of marked crosswalks at uncontrolled locations will be consistent with federal guidelines and city policy by 2010.	

Provide Mobility and Access through Transportation Choices

Goal: Create more livable urban centers that support housing and employment growth by encouraging a shift in mode choice towards walking, bicycling and transit use and accommodate growth.

Objective	2005 Baseline	Target	Comments
Make progress towards achieving established mode choice goals in the City's Comprehensive Plan.	Baseline is from 2000 and included in Chapter 3.3TDM, Tables 5 and 6.	Achieve 2010 mode choice targets for each urban center in the following categories: • work trips using non-SOV modes • all trips using non-SOV modes by residents of Seattle and its Urban Centers	Explore the possibility of doing a 5-year check in using CTR data.
Improve transit ridership by maintaining transit travel times above 30% of posted arterial speed limits on UVTN corridors.	Corridors for 2007 implementation have been identified. Monitoring of 2007 corridors will establish speed baseline to track progress against.	Baseline established and strategies developed to address UVTN performance issues. Proposed target is to report on the percentage of UVTN corridors with transit travels times above 30% of posted arterial speed limit by 2010.	The UVTN corridors have frequent service and high ridership. The next phase monitoring of UVTN corridors will enable SDOT to assess any modifications need to the monitoring system and then apply it to all UVTN corridors.
Complete the urban trails network of shared bicycle and pedestrian paths.	75% urban trails currently complete	83% urban trails system complete by 2010.	The remaining 17% of the urban trails network includes approximately 5% that is unfunded and 12% that is existing but needs improvements or significant maintenance.

Provide Mobility and Access through Transportation Choices, continued

Goal: Create more livable urban centers that support housing and employment growth by encouraging a shift in mode choice towards walking, bicycling and transit use and accommodate growth.

Objective	2005 Baseline	Target	Comments
Implement the transportation neighborhood plan recommendations that have been designated as a high priority by the neighborhood and are technically feasible.	Completed action on 10 technically feasible projects that are considered high priority recommendations.	Complete action on 15 additional (25 total) projects that are technically feasible and considered high priority recommendations by 2010.	
Define the elements of Seattle's bicycle network through a Bicycle Master Plan by 2006. As part of this effort, identify bicycle facility needs specific to urban centers and urban villages (including connections between urban centers and villages) so that future improvements can help improve bicycle mobility and access in and around these areas.	Define baseline through Master Plan.	Once defined, report on % of system complete by 2010 and then in 5-year increments thereafter.	Define measures for on- and off-street bicycle network, bicycle parking and other features.
Define Seattle's pedestrian network through a Pedestrian Master Plan by 2008. As part of this effort, identify pedestrian facility needs specific to urban centers and urban villages so that future improvements can help improve walkability and livability in these areas.	Define baseline through Master Plan.	Once defined, report on % of system complete by 2010 and then in 5-year increments thereafter.	Define measures for sidewalk network, curb ramps and other features (e.g. % of sidewalk network within urban villages complete)

Goal: Improve the movement of goods and services within Seattle, and between the Manufacturing and Industrial Centers, the regional highway system, and intermodal rail and marine facilities.

Objective	2005 Baseline	Target	Comments
Optimize signal timing to reduce delays for freight on arterials.	Define baseline as signal optimization projects on major truck streets and other principal arterials.	Limit increase in travel times for freight, transit and vehicles on corridors with optimization by 2010.	One emerging technology to track travel times is the use of GPS devices in trucks on key Port routes. Better speed and delay data will soon be available to track this measure.
Increase speed limits for rail freight south of King Street station by 20 mph to decrease overall rail travel times.	20 mph speed limit for rail south of King Street Station.	Increase to 40 mph the speed limit for rail south of King Street Station by 2010.	SDOT is leading this effort per Ordinance on the Burlington Northern Santa Fe (BNSF) mainline, south of King Street Station, including oversight of crossing safety improvements by BSNF at key locations.

Goal: Promote healthy neighborhoods with a transportation system that protects and improves environmental quality.

Objective	2005 Baseline	Target	Comments
Reduce or mitigate air, water and noise pollution by: reducing miles traveled through community based programs; and,	145,000 pounds of carbon dioxide emissions reduced since 2004 from the One Less Car challenge.	725,000 pounds of carbon dioxide emissions reduced by 2010.	The One less car Challenge calculates the reduction in vehicle miles traveled by participants in the program.
reducing vehicle idling on key corridors through transit signal optimization.	5% reduced emissions due to signal optimization on key corridors since 1998.	3% reduced emission from 2005 levels due to signal optimization projects on key corridors by 2010.	

Goal: Improve mobility by reducing congestion for transit, trucks and vehicles through construction zones along arterials streets.

Objective	2005 Baseline	5 Year Target	Comments
Reduce travel times for transit, vehicles and freight through construction corridors (arterials only) by .2 minutes per mile or 1 mph by the end of 2007 through permitting and utility coordination efforts.	Average speed of 16 mph through construction corridors.	Average speed of 17 mph through construction corridors by 2007.	Based on data from the US Census Bureau; Utility Coordination summary plans for City of Seattle, 1999-2003; travel times derived from King County Transit, 2002 and validated by actual drive times, and Light-Duty Automotive Technology and Fuel Economy Trends 1975 Through 2001.

Preserve and Maintain Transportation Infrastructure

Goal: Preserve and maintain arterial pavement in good or better condition to optimize safety, mobility and return on investment.

Objective	2005 Baseline	5 Year Target	Comments
Maintain or increase the percentage of the arterial street pavement reported in good or better condition.	71% of arterial pavement condition at good or better.	71% of arterial pavement condition at good or better by 2010.	Street maintenance—2005 pavement conditions report is updated every 2 years. Given funding constraints, SDOT will work to maintain current levels over the next 5 years.

Goal: Preserve and maintain bridges in fair or better condition to optimize safety, mobility and return on investment.

Objective	2005 Baseline	5 Year Target	Comments
Maintain or increase the percentage of bridges reported in fair or better condition.	63% of bridges and roadway structures condition as fair or better.	63% of bridges and roadway structures condition as fair or better by 2010.	Given funding constraints, SDOT will work to maintain current levels over the next 5 years.
	21% of necessary seismic bridge upgrades completed.	35% of necessary seismic bridge upgrades completed by 2010.	Seismic upgrades will be completed through replacement of structures, repairs to existing structures or establishment of a program to address seismic deficiencies.

Preserve and Maintain Transportation Infrastructure. continued

Goal: Preserve and maintain traffic control devices (e.g. signs, signals and roadway markings) to optimize safety and mobility.

Objective	2005 Baseline	Target	Comments
Achieve industry standard condition of all signs, signals and roadway markings. Create a baseline and reporting system by the end of 2005 that will include: a baseline and targets for Intelligent Transportation Systems (ITS—cameras and bus priority signals), Signal structures (poles, mastarms, spanarms), signal hardware, regulatory and safety signs, parking signs, roadway markings, and crash cushions/barriers.	Baseline defined in 2005. Once defined, report on baseline.	Once baseline defined, report on % of system complete by 2010 and then in 5 year increments thereafter.	Traffic staff will complete assessment of industry and government standards, as well as best management practices, and develop an appropriate application for Seattle conditions in 2005. Traffic staff will also develop a baseline and reporting system.

Goal: Improve the environment by protecting and enhancing the quality of the urban forest.

Objective	2005 Baseline	Target	Comments
Increase the level of maintenance and preservation of City owned street trees (based on an annual pruning cycle) and landscaping (based on percentage of inventory in excellent, good, fair or poor condition)	City-owned street trees currently on 19 year pruning cycle. 30% of City owned landscaping (approx. 5 million square feet) maintained at good condition; 70% in fair or poor condition.	City owned street trees on a 19 year pruning cycle. 30% of City owned landscaping maintained at good condition; 70% in fair or poor condition.	Urban forestry's goal is a 6 year pruning cycle, contingent on available funding for this program. Urban forestry's goal is a 100% of City owned landscaping in excellent condition, contingent on available funding for this program.